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1. (Currently Amended) A method for reconfiguring a communication system comprising a plurality of nodes coupled by a plurality of communication links comprising:
determining that said communication system includes a closed loop topology in response to receipt of a communication at at least a first of said plurality of nodes;
at least temporarily preventing effective communication across a selected one of said plurality of communication links by deactivating at least one of said communication links to change said closed loop topology to an open topology.
2. (Original) A method as claimed in claim 1 further comprising designating one of said plurality of nodes as a loop-breaking master in response to said step of determining, wherein said step of preventing is performed in response to a control signal or communication output by said loop-breaking master.
3. (Original) A method as claimed in claim 2 wherein said first node is said loop-breaking master.
4. (Original) A method as claimed in claim 1 further comprising reestablishing effective communication over said selected one of said plurality of communication links in response to detection of a link loss.
5. (Currently Amended) A method for detecting loop topology in a communication network having a plurality of nodes coupled by a plurality of links wherein each of said plurality of nodes is associated with a determinable node value comprising:
sending at least a first communication from a first node to at least a second node, said first communication including an indication of said node value of said first node;
said second node receiving said communication from said first node which includes a received node value and comparing said received node value to a first node value which is the

node value of said second node,

said second node outputting a signal indicative of a closed loop topology when said received node value equals said first node value

wherein said step of sending said first communication from said first node is performed in response to a change in the number of nodes or links in the system.

6. (Original) A method as claimed in claim 5 further comprising said second node outputting a communication which includes said received node value when said received node value is closer to a predetermined node value than said first node value.

7. (Original) A method as claimed in claim 5 further comprising said second node outputting a communication which includes said first node value when said first node value is closer to a predetermined node value than said received node value.

8. (Original) A method as claimed in claim 5 further comprising said second node outputting a communication which includes said received node value when said first node value is greater than said received node value.

9. (Original) A method as claimed in claim 5 further comprising said second node outputting a communication which includes said first node value when said first node value is less than said received node value.

10. (Original) A method is claimed in claim 6 wherein said node values are node addresses.

11. (Original) A method as claimed in claim 1 wherein said nodes include ethernet repeaters coupled to an ethernet switch in an ethernet network.

12. (Original) A method as claimed in claim 2 wherein said selected one of said plurality of communications links communication link is a communication link coupled to said loop-breaking master.

13. (Canceled)

14. (Original) A method for avoiding node isolation in a network communication system having a plurality of nodes coupled by a plurality of communication links, the method comprising:

deactivating at least a first communication link to provide a system having an open topology with no isolated nodes;

detecting effective loss of a communication link; and

reactivating said first communication link.

15. (Original) A method as claimed in claim 14 wherein said step of deactivating is performed in response to detection of a closed loop topology.

16. (Currently Amended) Apparatus for reconfiguring a communication system comprising a plurality of nodes coupled by a plurality of communication links comprising:
a state machine in at least one of said plurality of nodes configured to determine that said communication system includes a closed loop topology in response to receipt of a communication at said one of said plurality of nodes;

said state machine also configured to provide a control signal to at least temporarily prevent effective communication across a selected one of said plurality of communication links by deactivating at least one of said communication links to change said closed loop topology to an open topology.

17. (Original) Apparatus as claimed in claim 16 wherein said state machine is further configured to designate one of said plurality of nodes as a loop-breaking master in response to said step of determining, wherein said control signal or communication output by said loop-breaking master.

18. (Original) Apparatus as claimed in claim 16 wherein said state machine is further configured to reestablish effective communication over said selected one of said plurality of communication links in response to detection of a link loss.

19. (Original) Apparatus for avoiding node isolation in a network communication system having a plurality of nodes coupled by a plurality of communication links, the apparatus comprising:

means for deactivating at least a first communication link to provide a system having an open topology with no isolated nodes;

means for detecting effective loss of a communication link; and

means for reactivating said first communication link.

20. (Original) Apparatus as claimed in claim 19 wherein said means for deactivating, means for detecting and means for reactivating comprises at least a first state machine coupled to at least a first of said plurality of nodes.

21. (Original) A method as claimed in claim 19 wherein said means for deactivating includes means for deactivating in response to detection of a closed loop topology.